

Proposal (39) to conserve the name *Koelerietalia splendidis* Horvatić 1973 as a *nomen conservandum*

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Abstract

After a nomenclatural revision of the available names for the order of rocky grasslands of the Balkan Peninsula within the class *Festuco-Brometea*, based on Article 52 ICPN we propose the conservation of the name *Koelerietalia splendidis* against the name *Halacsyetalia sendtneri*. In syntaxonomic concepts not combining the limestone and serpentine rocky grasslands of the Balkans in a single order, the latter name would still be available as it is based on a different nomenclatural type.

(39) *Koelerietalia splendidis* Horvatić 1973 nom. cons. propos.
Typus: *Chrysopogono grylli-Koelerion splendidis* Horvatić 1973 (holotypus)

(=) *Halacsyetalia sendtneri* Ritter-Studnička 1970
Typus: *Potentillion visianii* Ritter-Studnička 1970 (lectotypus: Kuzmanović et al. 2016)

Taxonomic reference: Mucina et al. (2016).

Abbreviations: ICPN = International Code of Phytosociological Nomenclature, 4th edition (Theurillat et al. 2021).

Keywords

Balkan, dry grassland, Europe, *Festuco-Brometea*, *Halacsyetalia sendtneri*, *Koelerietalia splendidis*, *nomen conservandum*, phytosociological nomenclature, rocky grassland, *Scorzoneretalia villosae*, syntaxonomy

Introduction

Recent broad-scale syntheses involving the Balkan dry grassland syntaxa suggest re-arrangement of some alliances and orders within the class *Festuco-Brometea* compared to the view reflected in the EuroVegChecklist (Mucina et al. 2016; see updates at <https://floraveg.eu/vegetation/>). On the one hand, various authors suggest

that the meso-xeric grasslands of the alliance *Scorzonerion villosae* Horvatić ex Kovačević 1959 should be transferred from the Balkan order *Scorzoneretalia villosae* Kovačević 1959 to the almost pan-European order of meso-xeric grasslands *Brachypodietalia pinnati* Korneck 1974 nom. conserv. propos. (Willner et al. 2019; Dengler and Willner 2023; Vassilev et al. 2024). On the other hand, Vassilev et al. (2024) recently suggested merging the limestone and

serpentine rocky grassland of the Balkans into one order because of many joint species as well as similar structure and ecology. When following these two suggestions, the application of the ICPN (Theurillat et al. 2021) demands using the priority name *Halacsyetalia sendtneri* Ritter-Studnička 1970 in a sense (1) alien to common use, (2) not intended by the authors of the order nor, (3) according to our present knowledge, ever applied so before. We consider this a source of potential misinterpretation and thus propose here a solution that establishes a non-ambiguous name for the combined order.

Review of the situation and proposal

The dry rocky grasslands of the Balkan Peninsula usually have been referred to as order *Koelerietalia splendentis* Horvatić 1973 or *Scorzoneretalia villosae* Kovačević 1959 (both names appear in literature also with other, incorrect, author citations) (see Terzi 2015; Mucina et al. 2016). The latter was established as the oldest valid name (Terzi 2015; Mucina et al. 2016). According to Mucina et al. (2016) and Preislerová et al. (2022), the alliances of the *Scorzoneretalia villosae* are widely distributed in regions of the Balkan and Italian Peninsulas. However, if the nomenclatural type alliance *Scorzonerion villosae* Horvatić ex Kovačević 1959 is excluded from that order as suggested by recent studies (Willner et al. 2019; Dengler and Willner 2023; Vassilev et al. 2024), the name *Scorzoneretalia villosae* is no longer applicable for the rocky xerophytic grasslands of the Balkan and Italian Peninsulas. A possible solution would be to take up the name *Koelerietalia splendentis* which has already repeatedly been used, if in synonymy, to comprise amphi-adriatic calcareous xerophytic grasslands (Terzi 2015; Mucina et al. 2016). The oldest valid description of this order is by Horvatić (1973). Prior to this date another order of rocky dry grasslands in the Balkan Peninsula had been validly described, the *Halacsyetalia sendtneri* (Ritter-Studnička 1970). The latter name, however, has never been used for Balkanic rocky dry grasslands in general, but exclusively for serpentine rocky grasslands in the Central and Western Balkans (see Kuzmanović et al. 2016; Mucina et al. 2016). The concept of the *Halacsyetalia sendtneri* is much narrower, both geographically and ecologically, than

that of the *Koelerietalia splendentis*. According to Preislerová et al. (2022), the type alliance of the *Halacsyetalia sendtneri* (*Potentillion visianii* Ritter-Studnička 1970, according to Mucina et al. 2016 a syntaxonomic synonym of the *Polygonion albanicae* Ritter-Studnička 1970) occurs in two geographic entities for sure and three more with question mark, while the type alliance of the *Koelerietalia splendentis* (*Chrysopogono grylli-Koelerion splendentis*) occurs in four geographic entities for sure and six more with question mark. Also, within the same geographic units, the serpentine rocky grasslands are usually much rarer than the non-serpentine rocky grasslands (see maps in Vassilev et al. 2024). Taking up the name *Halacsyetalia sendtneri* for an order that comprises both the limestone and serpentine rocky grasslands (as the results by Vassilev et al. 2024 suggest; see also their Appendix S25), would give rise to confusion and, as the name-giving plant *Halacsya sendtneri* (Boiss.) Dörfler is a regional Southwest Balkan endemic and serpentine specialist, cause misunderstandings.

We thus propose to conserve the name *Koelerietalia splendentis* Horvatić 1973 against the name *Halacsyetalia sendtneri* Ritter-Studnička 1970 according to ICPN Art. 52. Since the two names have different types (see Terzi 2015; Kuzmanović et al. 2016), the name *Halacsyetalia sendtneri* Ritter-Studnička 1970 could still be used as usual after acceptance of this proposal, if limestone and serpentine rocky grasslands of the Balkans are separated at order level. Only if the *Halacsyetalia sendtneri* (or at least their type alliance) are included in a wider order of Balkanic (and Apennine) rocky dry grasslands, the name *Koelerietalia splendentis* Horvatić 1973 would have precedence. Adoption of this proposal would thus support nomenclatural clarity without excluding different syntaxonomic viewpoints.

Author contributions

JD conceived the idea of this paper and prepared a first draft, while all authors revised and approved it.

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